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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,271	08/19/2003	Bernd Meyer	Metal 1304-WCG	4080
27386	7590	12/28/2004	EXAMINER	
NORRIS, MCLAUGHLIN & MARCUS, P.A. 875 THIRD AVE 18TH FLOOR NEW YORK, NY 10022			RINEHART, KENNETH	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/643,271

Applicant(s)

MEYER ET AL.

Examiner

Kenneth B Rinehart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the in the case of the presence of liquid slag particles or a slag bath in the gasification space, the deepest GM flow thread (13) in the acceleration portion (7), as seen in flow direction against the horizontal (12), is aligned to be horizontal or downwardly inclined, the diameter at the beginning of the acceleration portion (7) is ... equal to the diameter of the supply portion must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

The abstract of the disclosure is objected to because it contains a list of reference numerals which is not US practice. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the adjoining acceleration portion" in line 6. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Gernhardt et al. Gernhardt et al (4043766). Gernhardt et al shows A method of injecting gasification medium into particle-loaded gasification spaces of fixed-bed, fluidized-bed or entrained-bed gasifiers by one component GM nozzles, wherein the supply portion (5) the GM isorate in the GM nozzle (1) does not fall below a minimum value (col. 4, lines 60-61, Inherently, the supply portion will have a minimum isorate if the exit rate is with in a certain range.), and that in the adjoining

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acceleration portion (7) the gasification medium is constantly accelerated and upon exit from the nozzle orifice (6) is concentrated in the focus (11) (The nozzle will inherently perform this function.), in the case of the presence of liquid slag particles or a slag bath in the gasification space, the deepest GM flow thread (13) in the acceleration portion (7), as seen in flow direction against the horizontal (12), is aligned to be horizontal or downwardly inclined (fig. 1), the deepest GM flow thread (13) is inclined downwards by 0 to 30 against the horizontal (12) (fig. 1).

Claims 1, 8,10 are rejected under 35 U.S.C. 102(b) as being anticipated by Dehn et al (5335608). Dehn et al shows A method of injecting gasification medium into particle-loaded gasification spaces of fixed-bed, fluidized-bed or entrained-bed gasifiers by one component GM nozzles, wherein the supply portion (5) the GM isorate in the GM nozzle (1) does not fall below a minimum value (The apparatus is presently capable of performing this function.), and that in the adjoining acceleration portion (7) the gasification medium is constantly accelerated and upon exit from the nozzle orifice (6) is concentrated in the focus (11) (The apparatus is presently capable of performing this function.), the GM nozzle (1 ) consists of a tubular supply tube (2) with a supply portion (5) (1, fig. 1) which merges into a conical acceleration portion (7) (14, fig. 1), The length of the acceleration portion (7) being 0.5 to 3 times the inside diameter of the supply portion (5) (fig. 1), the cone angle of the acceleration portion (7) is between 5 and 20 (fig. 1, abstract).

Claims 1, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Zinn (3302596). Zinn shows A method of injecting gasification medium into particle-loaded gasification spaces of fixed-bed, fluidized-bed or entrained-bed gasifiers by one component GM

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nozzles, wherein the supply portion (5) the GM isorate in the GM nozzle (1) does not fall below a minimum value (The apparatus is presently capable of performing this function.), and that in the adjoining acceleration portion (7) the gasification medium is constantly accelerated and upon exit from the nozzle orifice (6) is concentrated in the focus (11) (The apparatus is presently capable of performing this function.), the GM nozzle (1 ) consists of a tubular supply tube (2) with a supply portion (5) (36, fig. 2) which merges into a conical acceleration portion (7) (37, fig. 2), The length of the acceleration portion (7) being 0.5 to 3 times the inside diameter of the supply portion (5) (fig. 3), the diameter at the beginning of the acceleration portion (7) is smaller than or equal to the diameter of the supply portion (fig. 3), the cone angle of the acceleration portion (7) is between 5 and 20 (fig. 3).

#### ***Allowable Subject Matter***

Claims 3-5 and 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to apparatus and nozzles in general: Santen (4508040), Yamaoka et al (4564389), Seipenbusch (4352675), Lingl (3207202).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B Rinehart whose telephone number is 571-272-4881. The examiner can normally be reached on 7:20 -4:20.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBR

  
KENNETH RINEHART  
PRIMARY EXAMINER